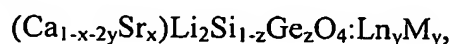


## CLAIMS:

1. A device for generating radiation by means of excimer discharge, equipped with an at least partly UV-transparent discharge vessel (1), the discharge space (2) of which is filled with a gas filling, with means for igniting and maintaining an excimer discharge (4, 5) in the discharge space, and with a coating (3) comprising a light-emitting compound of the following composition:

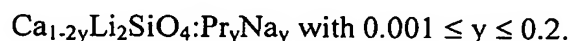


wherein Ln is a cation selected from the group  $\text{Ce}^{3+}$ ,  $\text{Pr}^{3+}$ ,  $\text{Sm}^{3+}$ ,  $\text{Eu}^{3+}$ ,  $\text{Gd}^{3+}$ ,  $\text{Tb}^{3+}$ ,  $\text{Dy}^{3+}$ ,  $\text{Er}^{3+}$ ,  $\text{Tm}^{3+}$  and  $\text{Yb}^{3+}$ ,

and M is a cation selected from the group  $\text{Na}^+$ ,  $\text{K}^+$  and  $\text{Rb}^+$ , with

$$0 \leq x \leq 0.1, 0.001 \leq y \leq 0.2 \text{ and } 0 \leq z \leq 1.$$

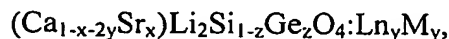
2. A device as claimed in claim 1, characterized in that the coating (3) is equipped with a light-emitting compound of the following composition:



3. A use of a device as claimed in claim 1 or 2 for disinfection purposes.

4. A use of a device as claimed in claim 1 or 2 for disinfecting water, air, or surfaces.

5. A light-emitting compound of the following composition:



wherein Ln is a cation selected from the group  $\text{Ce}^{3+}$ ,  $\text{Pr}^{3+}$ ,  $\text{Sm}^{3+}$ ,  $\text{Eu}^{3+}$ ,  $\text{Gd}^{3+}$ ,  $\text{Tb}^{3+}$ ,  $\text{Dy}^{3+}$ ,  $\text{Er}^{3+}$ ,  $\text{Tm}^{3+}$  and  $\text{Yb}^{3+}$ ,

and M is a cation selected from the group  $\text{Na}^+$ ,  $\text{K}^+$  and  $\text{Rb}^+$ , with

$$0 \leq x \leq 0.1, 0.001 \leq y \leq 0.2 \text{ and } 0 \leq z \leq 1.$$

6. A light-emitting compound of the following composition:

